Introduction:

A factory flaw was brought to light due to a critical incident that had occurred when an Arizona DPS State Trooper attempted to discharge his issued FN model FNS pistol in the line of duty. During the altercation, the muzzle of the trooper's firearm was pressed against the torso of a combative subject when he pulled the trigger. By design the semiautomatic pistol will not fire when the slide is out of battery. However, while using one of our reference collection FN model FNS 40 pistols to show the investigators the trooper's firearm did not malfunction, it was determined the trigger was not resetting completely (Images 1-3). When the pistol was placed on the table top, its striker could be heard releasing forward. This raised the question of whether the pistol would fire a chambered cartridge without having your finger on the trigger.

Testing Scenario One:

A primed cartridge case was hand chambered into a FNS 40 long slide from our reference collection. The muzzle of the pistol was placed against the rubber backstop in our shooting range. This caused the slide to go out of battery by approximately one eighth of an inch (Images 4-5). The trigger was pulled and held to the rear. The striker did not release forward at this point. The muzzle was then pulled away from the backstop while the trigger remained pressed and the striker released causing the primed cartridge case to fire. This scenario was tested multiple times with all versions of the FNS model and consistently fired a primed cartridge case. This scenario was also tested using live ammunition and a fully loaded magazine with the same results. Each time the pistol would fire when the muzzle was pulled away from the backstop and the trigger remained pressed to the rear.

Testing Scenario Two:

A primed cartridge case was hand chambered into a FNS 40 long slide from our reference collection. The muzzle of the pistol was placed against the rubber backstop in our shooting range. This caused the slide to go out of battery by approximately one eighth of an inch. The trigger was pulled to the rear and this time released. The striker did not release forward at this point; however, it was obvious that the trigger was not resetting to its forward most position. The muzzle was pulled away from the backstop and the pistol did not fire at this point. With the shooter's finger still off the trigger a small gunsmithing mallet was then used to lightly tap on the top of the slide which caused the striker to release forward and detonate the primer (Image 6). This scenario was tested multiple times with all versions of the FNS model and consistently fired a primed cartridge case. This scenario was also tested using live ammunition and a fully loaded magazine with the same results. Testing was done by tapping the side of the slide, the back of the slide, and even the bottom of the magazine with similar results, however, the pistol would fire less consistently when tapping on the bottom of the magazine. As a reminder, nothing was contacting the trigger of the pistol when it would fire during scenario two. In some instances, just placing the firearm back into its holster after removing the muzzle from the backstop would cause the striker to release forward and fire the primed cartridge case.

Cause of the Malfunction:

It was determined after disassembling the pistols that due to its design the striker would remain in the "cocked" position, held back by the striker block (Images 7-9). This was caused by a machined notch on the side of the striker. In this condition, with the trigger not reset, the only part retaining the striker in

this “cocked” position was the striker block. When the slide was tapped with a mallet or the firearm jarred at all it would cause the notch on the striker to bypass the striker block and fire the pistol.

Corrective Action by FN:

FN was contacted, and after showing video footage of both scenarios they quickly provided the installation of replacement parts to correct the defective parts in the department’s duty weapons as well as personal weapons purchased by DPS personnel. The corrective action was to replace the strikers from affected pistols to the new FN model 509 type striker. The machined notch that was present on the FNS models was no longer present on the model 509 strikers (Image 10). Similar testing was conducted using the new strikers and it was found to have corrected the problem.

Conclusion:

It is understood that having a real-life situation occur where a model FNS pistol is placed in this condition is rare. However, if the DPS trooper that attempted to use his duty weapon had not cleared what he thought was a malfunction and re-holstered his pistol it could have potentially went off at any point. It should also be noted that the malfunction was observed in brand new firearms as well as firearms that had been in service for some time. FN has since issued a service bulletin on their website and are offering replacement strikers for the affected FNS pistols. https://fnamerica.com/customer-support/fns-service-bulletin/

Image 1 : Trigger in its forwardmost reset position.

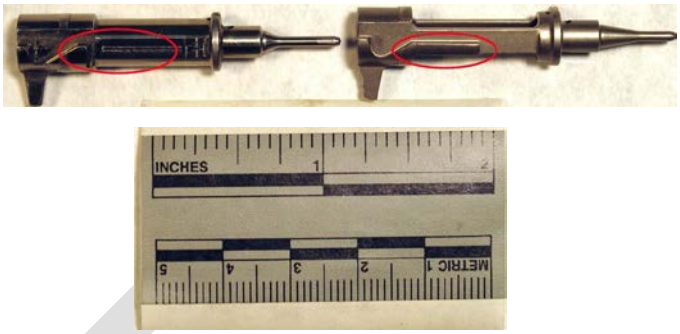

Image 10: FNS fault y str ik e r o n the le ft and the rep lace ment mode l 509 strike r o n the r ight. Note the machined notch on the faulty str ike r that makes contact with the st riker block.

I mage 2: Failure to reset after slide was placed out ofbauery and trigger pulled

I mage 3: Tri gger fully pressed to rear afler releasing str iker

Image 4: Slide fully forward and in battery

Image 5: Slide moved back out ofbauery

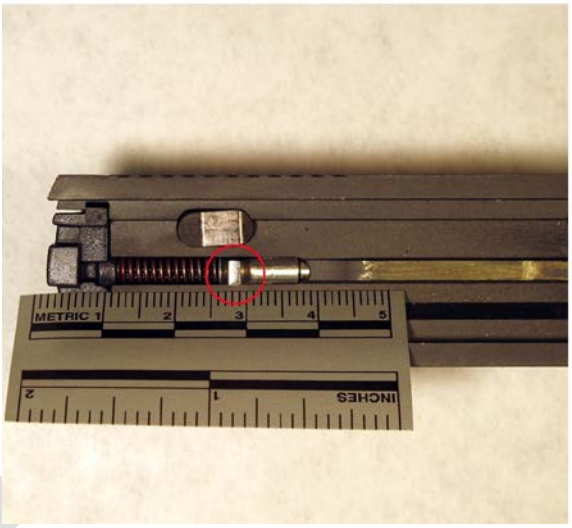

Image 7: S triker block ho lding the faulty st riker on the first notc h

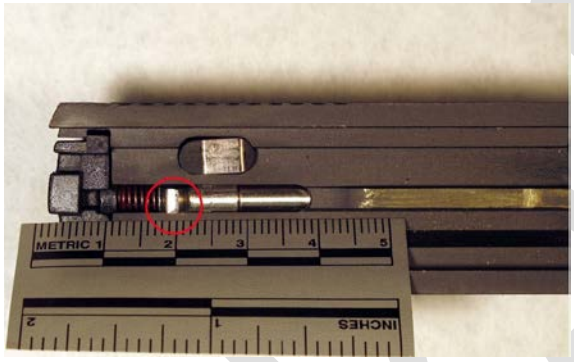

Image 8: Striker block holding the faulty striker on the second machined notch

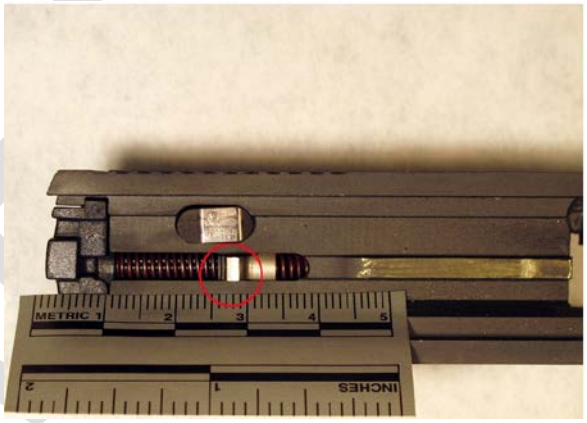

Image 9: Striker block holding the replace ment 509 striker on the first and only notch